

Sound System EZ Set-Up Guide











EZ SET-UP GUIDE

AV Now Sound System Setup

Thank You for purchasing an AV Now Sound System!

This instruction guide will help you set up your system easily and get the most from your new equipment. It really is simple. The following information will give step by step instructions on:

- Receiving Your Order
- Tools Needed
- Rack Mounting Your Components
- Filler Panels
- Special Mounting Instructions for Racks with Locking Security Door
- Basic In-Rack Layout Schematic for AV Now Sound Systems
- Making your AC Power Connections
- Making your Audio (Sound) Connections
- Speaker Cable and Master AC Power Connections
- Speaker Placement
- Volume and Equalization Adjustment
- Additional Information

Please note that not all systems are the same. These instructions are for a typical AV Now Premium Sound System. Notes have been made for most variations of this system.

Receiving Your Order

When receiving your order, check to see that you've received the items on your packing list before continuing. Please Note: Any discrepancies (either Damaged or Missing items) must be reported to AV Now within 24 hours of receipt. Keep all packaging materials and boxes in new condition in case there is a return issue.

Tools Required

Phillips head screwdriver.

Rack with Front Pop Out Panel



Rack Mounting Your Components

First: Open your equipment rack. This will be one of the largest rectangular boxes. The rack will house all of your components.

Remove the front and back panels from the rack. Lay your rack down on the floor. The long black metal rack rails with holes should be facing up; this is considered the 'front' of the rack. The bottom of the rack has either rubber feet or wheels (depending on the model purchased).

If you purchased a rack with wheels, they ship inside the rack and are attached to one of the rack rails. Remove the wheels and attach them to the bottom of the rack using the screws located in the mounting holes on the bottom of the rack.

Locate the small pack of rack screws in a baggie (usually packed with the speaker cables and some of the smaller accessories). Note: When you get to the Rack Mounting section below, each component will require 4 rack screws to install/'mount' it into the rack. The rack screws will be screwed through the four holes of each component into the rack rails located on the rack. **DO NOT secure any of the component pieces with the screws until you finalize the positioning of each component.**

Please read the following section before mounting any equipment.

Basic Rack Layout for AV Now Sound Systems

Unbox all the components and set them to one side of the rack in the approximate order they will be installed, top to bottom. The suggested layout in **Figure 1** is the recommended standard for an AV Now Premium Sound System.

Looking down into what will be the 'front' of the rack, lay each component on the internal rack rails. Each component is 19" wide and will fit perfectly onto the rack rails. Gravity will hold the components in place as you do this initial layout.

Note: While the following steps are based on Figure 1, you may vary the items' positions per your actual equipment and specific needs.

- Start with your **Power Module**. This is the piece that you will plug all of your AC power cords into. It's also the master 'on-off' switch for the entire system. Install this component in the top position of your rack.
- Next, place your Mixer into the rack. For the following examples we will use the AV Now Flexmix Mixer and we'll be referring to the rear panel for installation procedures.



Placing Mixer Into Rack, onto the Rack Mount Rails

• Next, place your Wireless Microphone System into the rack, if the receiver is rack-mountable. Your AV Now system designer will have gone over wireless rack-mount options with you during ordering. Refer to the Wireless Mic System's owner's manual for instructions about how to attach the wireless rack mount kit to the Wireless Mic Receiver (usually snap-in or attached with screws, depending on the manufacturer). Typically, you'll rack mount your Wireless Receiver just below the Power Module or Mixer, depending on the spread and extension of the antennae.

Some facilities prefer putting their Wireless Receiver on top of their rack for improved reception, especially if the rack is located in a different room or closet. If you choose this method of placement, your Wireless Mic Receiver will not be mounted in your rack, it will be set on top of the rack after everything else is secured and the rack is upright.

For improved security and a professional look, we always recommend a rackmount kit for your Wireless Microphone System.

- Next, position your Music Player(s): Your AV Now Sound System may contain a
 CD player, iPod Player or a Bluetooth Receiver. You may mount these players
 in whatever order you wish, however when mounting a piece which includes an
 iPod dock, make sure to leave enough room for the iPod to be easily docked and
 removed.
- Next, place your accessory **Drawer** into the rack. This is a great product for holding music, extra batteries, transmitters, headsets, first-aid kits, instructor log books, etc. A rack drawer helps to keep the area around the system tidy and organized.
- Next, place your Power Amp (if using passive speakers) into the rack.
 A power amp should be located near the bottom. You will omit this step if you've chosen Powered Speakers (speakers with amplifiers built in). Some amplifiers, like the Crown XTi series, have built-in handles on the front panel that can interfere with the mounting of security doors. In this case, you'll want to make sure the amp is not all the way at the bottom of the rack.

Filler Panels

If you've purchased **Filler Panels**, now is the time to position them. Filler panels are 1 to 4 rack-space ventilated panels which fill in whatever spaces are left open after the components are positioned. These panels give a finished 'no holes' look to your sound system. Your AV Now system designer will have calculated how many filler panels will be needed to fill in all the open space in the front of the rack.

AV Now recommends you position your components with few or no spaces between them until you get to the power amp. Leave spaces above the power amp and use your filler panels here, as they will provide natural ventilation for the amp. It's OK to use some filler panels in higher portions of the rack, but make sure you give the amp as much breathing room as you can. If you have a dock for an iPod or iPhone, make sure there's enough room above it for clearance.

If you did not order filler panels with your system, they may be ordered and installed at a later time.

Security Door

If you're installing a Locking Security Door, the door must be installed at the same time as the components. If you're not installing a Locking Security Door, please skip to Final Rack Mounting below.

The same screws that secure the rack components also secure the security door and its mounting rails. After you've positioned all the system components in the rack, set the security door hinge-mounting rail on top of either the left-hand or right-hand side of the components, line up the holes, and install the mounting screws. Do the same with the locking rail opposite the door hinge rail. When you install the mounting screws, you are in the Final Rack Mounting stage described next.

Final Rack Mounting

After you've laid out the components (and positioned security door, if applicable), use 4 rack screws per component to secure each piece into the rack. Place the screws into the 4 holes in each component's faceplate and hand-tighten them into the holes on the rack rails underneath. Snug them up using a Phillips head screwdriver. Be careful not to over-tighten or strip the screw heads.

After securing all the components, carefully tilt the rack back up into its upright position. Note that the rack will be heavier now than when you first laid it down. We suggest using two people to tilt the rack back up.

Making Your AC Power Connections

All components should be mounted before making any AC Power Connections. Plug the AC power cord from each component into the back receptacles of the Power Module. See Figure #2. Some items use a detachable power cord such as the Flexmix, Aeromix 2+2 and the Wireless Microphone Receiver. Make sure to locate these and plug them in. The power module will serve as the master on/off "switch" for the whole system during normal usage.

Making Your Audio (Sound) Connections

All components should be mounted (screwed in) before making any Audio Connections.

Connecting a sound system's audio is simpler than you might think. All of the Sound Sources (wireless mic receiver, CD player, and iPod players/docks) will connect to the Mixer. The Mixer connects to the Power Amp. The Power Amp connects to the Speakers. See Figure #3.

Keep in mind the simple rule that an Output from one component connects to an Input of another, usually in stereo or pairs. Here we go!

Most sound systems use a **Wireless Microphone System**. To connect a wireless microphone to your system, plug the supplied 6 ft. cord (1/4" to 1/4" plugs) to the **Output** of the Wireless Receiver. Plug the other end of this cable into the **Mic 1 Input** on the back of your Flexmix/Aeromix. A second wireless microphone system can be plugged into **Mic 2**.

CD Players, Bluetooth receivers, and iPod/Mp3 Players use the red and white ended RCA to RCA cables (supplied) to connect the output of each of these players to the **Music Inputs** on the back of the Flexmix or Aeromix 2+2.

Note: The Flexmix and Aeromix 2+2 mixers have front panel inputs to make plugging an iPod or other Mp3 player into either one easy. Simply use the supplied cable. Plug the small 1/8" mini-phone jack into the player's headphone output and plug the larger 1/4" plug into the front panel input on the mixer. On the Flexmix, channel 3's music volume controls this input, on the Aeromix, channel 2's music volume controls it.

For systems that use a Power Amplifier: After completing the output connections of all of your sound sources into the inputs of the Flexmix or Aeromix, connect the mixer's "L" and "R" Main Outputs to the channel one and channel two inputs on the back of the Power Amplifier using the supplied cables. These cables are 5 feet long. Connect the 1/4" plug into the main outputs on the mixer and the 3-prong XLR connectors into the inputs on the amp. AV Now takes care to ship the correct connection cables with each system.



Speaker and Master AC Power Connection

You're almost done!

Your rack comes with two panels for the front and back. You removed these for Rack Mounting. Whether or not you use a panel in front – to cover components when the rack is not in use- is up to you. A Security Door takes the place of the front panel option. We strongly recommend using a pop-out panel on the back of the rack (if using a carpeted rack) to protect your components and wiring. It also looks good. Grab either panel and get ready to install it on the rack's back.

The pop-out panel has a hole in the bottom to route the Power Module's 'master' AC cable and the system's Speaker Cables through. Run these 3 cables through the hole but leave the panel uninstalled until all connections are made.

After routing, plug each Speaker Cable's (usually) BLUE Speakon Connector into an Output on the back of the Power Amplifier. If you have a system with powered (active) speakers, see below for setup info.

Powered Speaker Hookup/Settings

If you purchased **Powered Speakers**, (speakers with amplifiers built into them), you'll need to connect electrical power to each speaker. Typically, AV Now ships 'Siamese Cables' with these systems. A 'Siamese Cable' provides both electrical power and audio signal to your powered speakers. There are two connectors on each end of these cables. Connect the male AC Power plug to the power conditioner. Connect the female AC Power plug to the speaker. Connect the 1/4" plug to the output of the mixer. Connect the XLR plug to the input of your speaker.

Again, with powered speakers, you do not have a power amplifier in your rack; your amplifiers are built into the speakers. Initial volume adjustment should be made at the Powered Speaker. We suggest setting the volume (and tones controls, if applicable) to 12 o'clock. Volume adjustments during classes will be made at the Flexmix/Aeromix 2+2 (Mixer). See Volume and EQ adjustment section for details.



Finishing the Rack

After you've routed and connected the Speaker Cables and Main AC Power cable through the rear **pop-out** panel, install the pop out panel into the rack by simply pushing it straight into the back of the rack where it will naturally seat into the form fitting grooves. If your rack has a different type of back panel (such as on a plastic or metal rack), you may choose to leave the back panel off.

Proper Speaker Placement

WE STRONGLY SUGGEST USING THE SPEAKER PLACEMENT DIAGRAMS FOUND IN FIGURES #5 & #6. Fitness sound is different than home stereo sound. "Speakers in corners" can sound great at home but corners are seldom the best place to mount speakers in a Fitness Sound/PA situation.

A sound system with a wireless microphone requires proper speaker location to maximize sound quality and reduce feedback. Instructors need to hear themselves, and participants need clear direction and motivating music with minimal ear strain. Finding the proper balance between all these elements is more easily achieved through proper speaker placement.

The Speaker Placement Diagrams in this Guide take all of these factors into account. Refer to them for basic Speaker Placement.

Caution! Mounting Speakers to walls or ceilings should be done with great care. AV Now recommends using appropriate mounting brackets only. Please refer to the owner's manual for the speaker mounting brackets and adhere to them. You may wish to have your speakers mounted by a professional or by your electrical/maintenance department.

Volume and Equalization Adjustment

Make sure all components have their individual power turned "On". Make all volume adjustments **gradually** to avoid microphone feedback or abruptly loud music. **Microphone feedback** is a function of the microphone element picking up various frequencies of its own sound through the speaker system and re-amplifying them over and over until there is a squeal or hum.

By adjusting the mic's volume and tonal quality (treble and/or bass), and/or repositioning the speakers, most feedback situations can be eliminated.

Suggested Volume and Tone Control Starting Points

General Guidelines

Make sure all your components are in the "ON" position and the Power Module is "ON" before proceeding.

Your Flexmix/Aeromix 2+2 has a hidden Master Volume on the back, which controls the loudest overall volume of the system.

- Start with this and all bass/treble controls at 12 o'clock, straight up.
- Set the volume controls on the front of the Power Amp at 2 or 3 o'clock or 70-75%.
- Turn on the Wireless Microphone Transmitter Pack and gradually bring up the appropriate Voice/Mic level (larger black knob on mixer– turning clockwise) until the voice is heard clearly.
- Adjust the Music volume levels (while the music is playing turning the larger black knobs on the music side of the mixer clockwise) to desired levels to obtain the proper mix.
- Make adjustments as necessary.

These are suggested starting points. Variations in class formats, instructor preferences, and programming may require different adjustments.

Additional Information

To learn more about wireless microphone feedback and how to avoid it, we recommend you read the articles online at avnow.com. Of course, you may always call us for Free Lifetime Technical Support.

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Figure 1

Basic In Rack Layout Schematic for AV Now Sound Systems



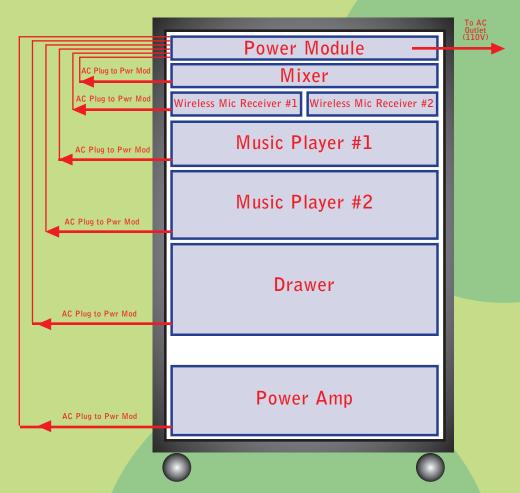
16 Space Rack with Wheels

Please note: This is a basic set-up, your actual system configuration may vary depending on the items purchased. Contact us with any questions:

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Figure 2

Basic AC Power Layout Schematic for AV Now Sound Systems

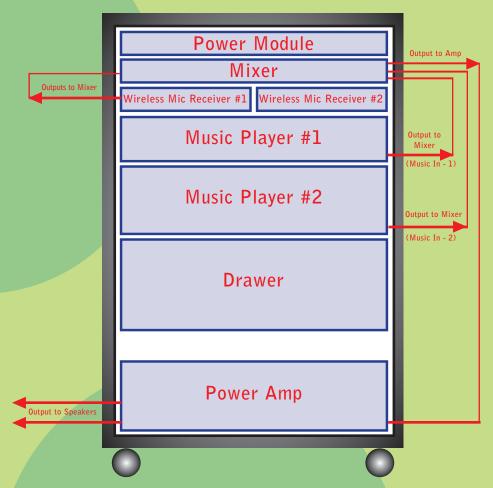


16 Space Rack with Wheels

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Figure 3 Basic Audio Connection Schematic for AV Now Sound Passive Speaker Systems



16 Space Rack with Wheels

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Figure 4 Basic Audio Connection Schematic for AV Now Sound Powered Speaker Systems

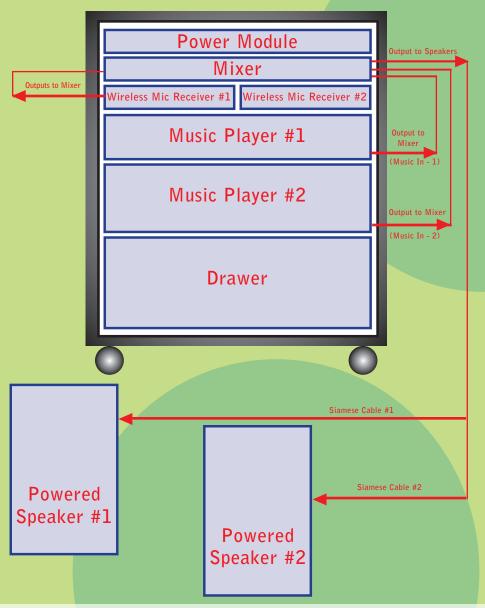
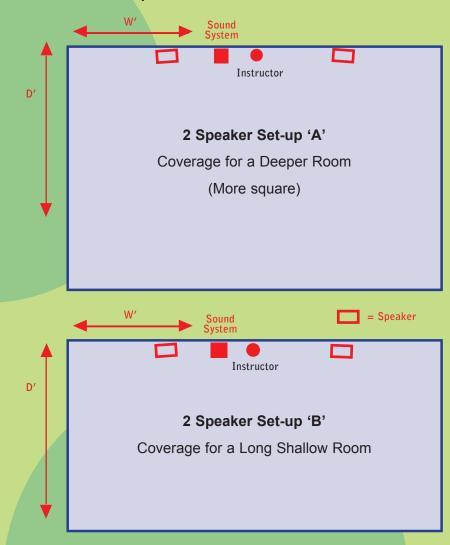


Figure 5 Speaker Placement 2 Speakers-Medium to Small Rooms



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Figure 6 **Speaker Placement** 4 Speakers-Large to Medium Rooms Sound 4 Speaker Set-up 'A' Coverage for a Deeper Room (More square) = Speaker Sound Instructor 4 Speaker Set-up 'B' Coverage for a Long Shallow Room

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- Wireless Mic Systems
- Group Ex Sound Systems
- Aqua-Aerobics Sound
- Portable Sound

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